

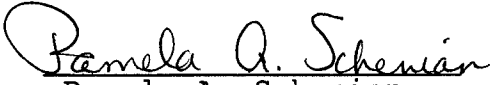
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A Phase I Archaeological Survey
of a Proposed Water Pipeline
to the Anderson Golf Course Facilities
on the Fort Knox Military Reservation,
Hardin County, Kentucky

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September 1994


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ABSTRACT

In June 1994, the Fort Knox cultural resource management staff conducted a Phase I archaeological survey and literature review of approximately 0.22 ha (0.50 acres) for a proposed water pipeline on the Fort Knox Military Reservation, Hardin County, Kentucky. An additional 1.50 ha (3.70 acres) were surveyed along and near the access route to the pipeline from the nearest gravel road.

The survey resulted in the recording of one archaeological site, 15Hd495. Site 15Hd495 is a late nineteenth to mid twentieth century historic site. It is not eligible for the National Register due to previous disturbance. No additional archaeological work is recommended for 15Hd495.

It is recommended that the water pipeline be installed as proposed, since no sites were found in the pipeline corridor and site 15Hd495, in and adjacent to the pipeline access road, is not eligible for the National Register.

MANAGEMENT SUMMARY

In accordance with Executive Order 11593 and other applicable federal laws and regulations, a Phase I archaeological study was conducted of the corridor (0.22 ha or 0.50 acres in size) of a proposed water pipeline and an additional 1.50 ha (3.70 acres) in the surrounding area on the Fort Knox Military Reservation, Hardin County, Kentucky. The survey, conducted on June 21, 1994, resulted in the recording of one site (15Hd495). The site is a late nineteenth-mid twentieth century farmstead.

It is recommended that the pipeline installation be completed as proposed. Site 15Hd495 is not eligible for the National Register, and no further archaeological work is recommended. It is recommended that the partially open cistern and foundations be completely filled for safety reasons.

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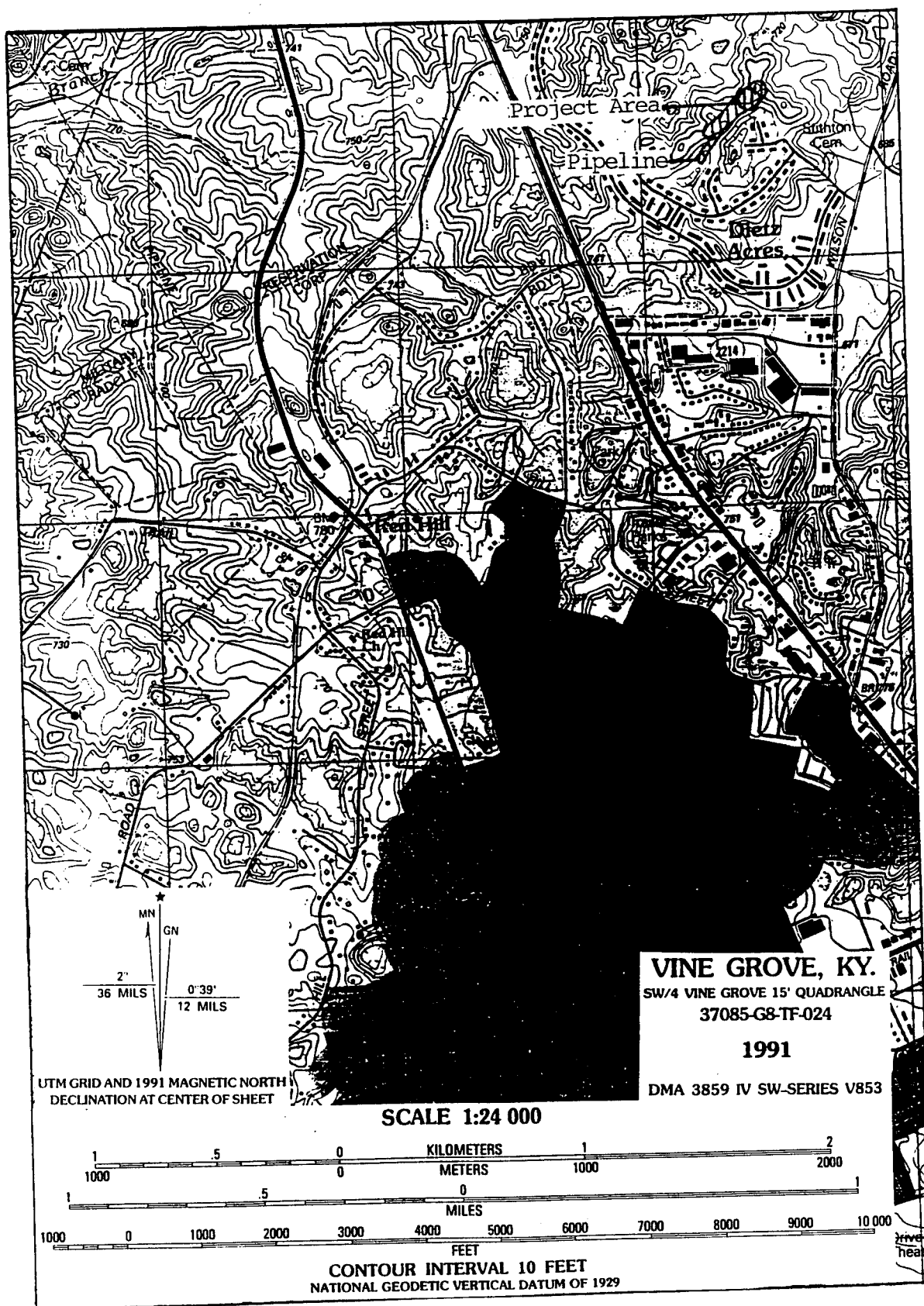
I. INTRODUCTION

In June 1994, the Fort Knox Cultural Resource Management (CRM) staff performed a Phase I cultural resources survey of a proposed water pipeline (0.22 ha or 0.50 acres) and an adjacent area (1.50 ha or 3.70 acres) at Fort Knox, Hardin County, Kentucky (Figure 1). The project area is located in the cantonment, at the edge of the Anderson Golf Course. The proposed pipeline will extend downhill from a level area into a ravine where it will intersect with existing pipelines. The pipeline will connect to a large quonset hut which was recently erected, without environmental and cultural resource studies, on a narrow level area above the ravine. The level area and the adjoining road and a section of the woods adjacent to the golf course were also surveyed. These areas were examined to ascertain if sites were present in the access route to the pipeline and to determine the degree of disturbance caused by the construction activities and road building and whether or not cultural resources had been affected by these activities.

The archaeological survey and literature review conducted in preparation for the pipeline installation were required to comply with the National Environmental Protection Act, or NEPA (Public Law 91-190), the Historic Preservation Act of 1966, as amended (Public Law 89-665), the Archaeological Resources Protection Act of 1979 (Public Law 96-95), Presidential Executive Order 11593, and Army Regulation 420-40. During 1993, the Fort Knox Staff Archaeologist obtained all the documents necessary to perform Phase I literature searches for the installation (e.g., site forms, reports of previous investigations, historic maps), and these are on file at the Cultural Resource Management Branch of the Directorate of Public Works, Fort Knox. No file check was made with the Office of State Archaeology and the Kentucky Heritage Council specifically for this project. A literature search revealed that the proposed pipeline area had not been surveyed previously. The project area, therefore, was field inspected in its entirety in the current study.

The proposed pipeline area is located in the Plain section of the Pennyryle cultural landscape. The project area is on the top and southwestern slope of a hill on the karst plain, and is surrounded by sinkholes. The elevations of the project area range from 725 to 750 feet, and 15Hd495 is at 755 feet. Soils in the project area are classified as Crider-Vertrees soil association (U.S.D.A. 1975). The soil type on 15Hd495 and in the proposed pipeline is Vertrees silt loam.

The surface reconnaissance of the proposed pipeline was performed by the Cultural Resource Management Branch staff (Pamela Schenian, Stephen Mocas, and Michael Siefring) on



June 21, 1994. A total of 6.0 person hours were spent in the survey of the proposed pipeline and 15Hd495.

The artifacts from the survey were washed and catalogued by student assistants at the University of Louisville Program of Archaeology. The artifacts were analyzed by the Staff Archaeologist. The artifacts and the documentation for this project will be curated at the Program of Archaeology, University of Louisville, on a "permanent loan" basis, under contract number DABT 23-93-C-0093, for curatorial and technical support (copy of contract on file, DPW, Fort Knox, Kentucky). Duplicate copies of the documentation will be stored at the Directorate of Public Works (DPW), U.S. Army Armor Center and Fort Knox, Fort Knox, Kentucky.

II. SETTING AND ENVIRONMENTAL BACKGROUND

O'Malley et al. (1980) have prepared a detailed description of the setting and environmental background of the Fort Knox base as a whole. This section will concentrate on the topographic characteristics of the scheduled rehabilitation areas inspected in the current study.

The project area lies in the Mississippian Plateau physiographic region of Kentucky (McGrain and Currens 1978:35). The proposed pipeline and other areas surveyed are on the top and southwest slope of a hill in the karst upland area.

The drainage patterns in the area have been altered extremely since Army acquisition, due to the construction of roads, the Anderson golf course, and the South Dietz neighborhood. Currently, the headwaters of several intermittent streams are located over 1 km distant, but it is likely that a closer water source once existed (e.g., sinkholes with standing water). A cistern is located on the Campbell-Bennett farmstead (Site 15Hd495), through which the access road passes.

The proposed pipeline corridor descends from a level area down the side of a ravine to a point where it intersects existing pipelines. The level area and the adjoining road and a section of the woods adjacent to the golf course were also surveyed, because they had been disturbed recently by construction activities and roadbuilding. The level area had been previously cleared and bulldozed, probably during the construction of the Anderson golf course in the 1940's, and a quonset hut had been erected recently on the location. A gravel road was extended and improved during the building of the quonset hut and a small area of woods at the top of the hill above was bulldozed during these construction activities. This activity resulted in the disturbance of a portion of the Campbell-Bennett property, site 15Hd495.

III. PREVIOUS RESEARCH

Approximately 30,000 acres of the Fort Knox installation have been surveyed, primarily in cultural resource management (CRM) studies. Schenian and Mocas (1994a) summarize the archaeological studies conducted on or near the installation through August 1994. This section will focus on the previous research conducted within a 2 km radius of the current project area.

O'Malley et al. (1980) surveyed portions of Hunting areas 15, 72, and 73 within 2 km of the current project area. Fiegal (1982) surveyed the Radcliff Industrial Park access road, including land in HA 15, as well as off the installation. Ball (1991) also surveyed a 19 acre tract near Radcliff prior to disposal of the tract, recording two historic/modern trash dumps which were not assigned state site numbers. Schenian and Mocas (1994b) surveyed 132.2 acres in and around the present Prichard Place housing area as part of the proposed replacement project. The CRM staff reported one historic farmstead, 15Hd491, in the proposed rehab area in HA 57 (Schenian 1994). The closest site recorded in any of these studies is 15Hd215, recorded by O'Malley et al. and revisited by Fiegal, which is located 1.3 km west of the project area.

No standing structures listed on or eligible for listing on the National Register of Historic Places are located in or within view of the current project area, and no unassessed structures greater than 50 years old are located in or near the project area. No archaeological sites listed on the National Register are known to be located in or immediately adjacent to the current project area.

IV. SURVEY PREDICTIONS

Based on previous archaeological research in the area, the history of settlement, and the environmental setting of the project area, the following results were expected:

- 1) Archival research indicated that the Campbell-Bennett property was adjacent to the proposed pipeline area. The historic property boundaries and structure locations were depicted on the 1919 land acquisition maps, providing detailed information on the number of structures and the layout of farmsteads in this project area. The project area also is depicted on the land acquisition maps from the 1940's, which depict the property boundaries, but not specific structural loca-

tions. This information provides a basis for the location and interpretation of the historic site.

- 2) The level area below the Campbell-Bennett buildings appeared to be a likely location for prehistoric or historic settlement, but the ravine in which the proposed pipeline was to be placed appeared too steep to be a feasible site location.

V. FIELD METHODS

The proposed pipeline, access road, and adjoining areas were systematically walked in transects at paced 5 m intervals. The remainder of the level area, to the west of the quonset hut and north end of the proposed pipeline, was walked in transects at paced 10 m intervals.

The pipeline corridor is approximately 10 m wide and approximately 80 m long. Visibility in the ravine through which the proposed pipeline will be installed was poor (less than 10 percent ground surface visibility); therefore, leaves were scraped for the ground surface and cleared patches of ground were examined. The area within 15 m of the existing pipeline was in a clearing that had been recently reseeded and had a thin mulch (hay) covering. Ground surface visibility was 50 percent or more in this area. No cultural materials were observed in the pipeline corridor.

Most of the level area in which the quonset hut had been erected had been previously bulldozed. This area had sparse mowed grass, and ground surface visibility was nearly 100 percent. Walkover of the area west of the quonset hut indicated that the area had been previously borrowed to subsoil, probably during the construction of the adjoining golf course. Within 15 m of the quonset hut, the ground surface was covered with gravel and could not be inspected. No cultural materials were observed in the vicinity of the quonset hut or to the west of the quonset hut.

East of the quonset hut was a recently bulldozed area and a wooded area bisected by a old dirt road that joined an existing gravel road that forms a boundary of the golf course. The dirt road had once been the farm road of the Campbell-Bennett farm. This unimproved road appears and disappears from the Vine Grove quad over the period 1947 to 1991, so its use by the Army has varied over time. The woods and vegetated area north of the road apparently extended up to 20 m farther west until recently, when this area was bulldozed during the construction of the quonset hut. A bulldozer path also had been cut through the woods to the south of the road, probably to allow two vehicles to pass in

or out of the quonset hut construction area at the same time, since the dirt road was only one vehicle-width wide. The bulldozed portion had 100 percent ground surface visibility and the woods had variable visibility, primarily due to leaf cover.

Historic artifacts were first noted in the trip of ground that had been bulldozed to subsoil to form a vehicle path through the woods. The wooded area on either side of the road for a distance of approximately 20 m was examined, until heavily disturbed areas were encountered. The woods were walked at 2 m intervals to take advantage of all available open patches. Numerous small bulldozer piles were noted in the wooded area. Figures B-1 through B-4 in Appendix B depict the locations and plans of 15Hd495. The site plans show the testing methods and salient features of these sites in greater detail.

Because of the degree of disturbance of the archaeological site observable from the ground surface, only one shovel probe was excavated in the site area. This shovel probe was excavated in a cistern which was partially filled with dirt. The shovel probe was approximately 30 cm square and excavated to a depth of 30 cm or until sterile subsoil was encountered. The walls of each STP were scraped and inspected for evidence of archaeological materials or deposits. The fill from the shovel probe in the vicinity of the one archaeological site identified in this study was screened through one-quarter inch hardware cloth. The shovel probe had a very mottled soil profile (Figure B-4). It is believed that the cistern had been filled in shortly after Army acquisition.

In summary, the archaeological investigation of the proposed pipeline corridor and the adjacent area resulted in the recording of one new site, 15Hd495. This site and the materials collected from it will be described in greater detail in the following sections.

VI. ARTIFACT TYPOLOGY AND MATERIALS RECOVERED

Maples (1991) was used to sort the artifacts recovered in this project. The following paragraphs summarize the artifact typologies used in the sorting and analysis of the artifacts recovered during this project, and describe specific artifacts in greater detail.

South (1977:95-95) defined a system of artifact classification based on function. Under South's system, for example, ceramics and curved glass are kitchen group artifacts and flat glass and spikes are architectural group artifacts.

Table 1 summarizes the distribution of the historic artifacts collected from 15Hd495. In addition to the artifacts described below and listed in the chart, a large metal washtub and a partial enamelware pot were observed on the site, but not collected due to their size. A brick lined cistern, a cement outbuilding foundation, and limestone foundation chunks were also observed, but not collected.

KITCHEN GROUP

Ceramics

Historic ceramics are divided into coarse earthenware, stoneware, ironstone, refined earthenware, semi-porcelain, and porcelain. Coarse and refined earthenware have the most porous paste, stoneware and ironstone have less porous paste, and semi-porcelain and porcelain have the least porous paste. Each of these broad categories is further divided into more specific types based on paste texture and color, glaze characteristics, and decoration (Maples 1991).

Stoneware. A total of four stoneware sherds were recovered in this project. Stoneware cannot be dated to a more accurate range than nineteenth to twentieth century and vessels frequently lacked makers marks. Three of the stoneware sherds have buff paste and one has gray paste. The gray paste stoneware sherd has gray glaze exterior and brown glaze interior. The three buff paste stoneware sherds are all from one large bowl with a blue glaze interior and exterior and a bisque rim. Two of the bowl pieces refit along a recent break, but the third piece could not be fit.

Ironstone. A total of 15 ironstone sherds were collected in this project. All have white paste. Ironstone dates from 1860 to 1920 (Ketchum 1983:201). Ironstone with scalloped rims and/or impressed and/or relief decoration date from ca. 1895 to 1920 (Montgomery Ward & Co. 1969; Sears, Roebuck & Co. 1920). Two of the ironstone sherds are Fiestaware -- one body sherd in dark blue and one bowl or plate rim in pale yellow -- which date from 1935 to 1945. The remaining 13 sherds consist of one cup base sherd, three plate base sherds, one mug rim, one scalloped rim from a plate or large bowl, two plate rim sherds which refit, one small rim, one body sherd with cream glaze, two plate body sherds with white glaze, and one cup body sherd. The small plate rim has a scalloped rim and relief decoration consisting of a wavy band of dots. The two refit plate rim sherds are from a vessel with a brown painted band at the shoulder and a gilt band at the rim. The scalloped rim from the plate or large bowl has a slight impressed band below the rim.

Refined Earthenware. The one piece of refined earthenware collected in this project is whiteware, i.e., earthen-

Table 1. Inventory of Historic Artifacts from 15Hd495.

KITCHEN GROUP

Ceramic	
Stoneware	
Buff	3
Gray	1
Ironstone	
White	13
Fiestaware	1
Refined Earthenware	
Whiteware	1
Semi-porcelain	2
Porcelain	1
Glass, bottle	
Amethyst, solarized	4
Aqua	5
Cobalt	1
Clear	9
Glass, dish	
Clear	2
Pink Depression	1
Kitchen Group Total	44

ARCHITECTURAL GROUP

Glass, flat (window)	
Green	1
Spike	1
Architectural Group Total	2

FURNITURE/FURNISHINGS GROUP

Glass, furniture	
Container	5
Porcelain, furniture	
Lamp?	1
Furniture Group Total	6

MISCELLANEOUS GROUP

Mussel shell	1
Miscellaneous Group Total	1

TOTAL HISTORIC MATERIALS	53
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ware with a white paste. The rim sherd has white glaze on the exterior and interior surface, and a scalloped rim. Whiteware dates from 1830 to 1890 (Smith 1983:171).

Semi-porcelain. Two semi-porcelain plate rim sherds, which refit, were collected in this project. The plate had a brown painted band below the rim. Semi-porcelain dates from 1880 to present (Worthy 1983:337).

Porcelain. One porcelain sherd was recovered from the site. It is a saucer rim sherd with relief decoration in a leaf pattern, gilt decoration over portions of the relief decoration, and transfer print decoration in a green, blue, yellow, purple, and pink floral motif.

Glass

Glass kitchen artifacts are divided into three main categories. These are bottles, dishware, and canning jar lid liners. No lid liners were found in this project.

Bottle glass. A total of 19 bottle glass fragments were recovered in this project.

Four pieces of solarized amethyst glass were recovered. Amethyst bottle glass dates from ca. 1880 to 1914 (Newman 1970:70-75). One of the pieces is an oval bottle base recovered from the surface of the fill in the cistern. The other three amethyst pieces were recovered from the site surface. Two are body fragments, and one is a partial bottle. The partial bottle has an Elixir or Handy base with the makers mark "M" in a circle. The bottle is embossed vertically on the front panel "...D · BLOCK" over "...FFERSON ST." over "...YSVILLE, KY." The "D" and "B" of the first line are in script and the remainder of the embossing is in block letters. The makers mark was used by the Maryland Glass Company, Baltimore, Maryland, from 1907 to at least 1971 (Toulouse 1971:339-341), and the product was probably distributed by a business in Maysville, Kentucky.

Clear glass dates from 1875 to present (Fike 1987:13), and nine fragments were found. One of these is a body fragment recovered from the shovel probe excavated in the cistern, and the remainder were collected from the site surface. Three (two refit) are from the base of a large bottle base with the Owens Illinois Glass mark (an "I" in an oval superimposed on a diamond) used from 1929 to 1954 (Toulouse 1971:403-406). The mark does not have the typical plant and year identification marks, so it may date to the earlier portion of this range. One of the other sherds is a shoulder lettered "GALLON", which probably derives from the same bottle as the three base pieces. Another body fragment is lettered "A" and two body pieces are unlettered. The eighth clear glass piece is part of a panel bottle.

Cobalt glass dates from 1890 (Fike 1987:13) to present and one piece was recovered during the project. It is an unlettered body fragment.

Five pieces of aqua glass were collected, and all are from canning jars. One is a base fragment, three are unlettered body fragments, and one is a body piece lettered "...AL..." over "MAS..." (Ball Mason).

Dish glass. A total of three fragments of dish glass were recovered in this project. Dish glass colors are dated the same as bottle glass colors, although dish glass often has recognizable pressed or cut patterns which permit more specific identification of manufacturing dates. Two pieces of clear dish glass and one piece of pink Depression glass fragment (post-1929) were recovered. All of the glass dish pieces are from tumblers, but the patterns could not be identified.

ARCHITECTURE

Flat (window) glass

One green flat glass fragment was recovered from the site.

Spike

One spike was found on 15Hd495.

FURNITURE/FURNISHINGS GROUP

Furniture Glass

Five chips of furniture glass were reconstructed into a single piece of very thick clear glass, believed to derive from a figural or other decorative canister (cf. Whitmyer and Whitmyer 1990).

Furniture Porcelain

One large piece of very thick porcelain was found at the site. It is believed to be a portion of porcelain lamp.

Miscellaneous

One mussel shell fragment was recovered from the site. Due to the lack of water sources in the vicinity, it is

assumed that it was associated with the historic occupation, rather than deposited on the site by natural means.

VII. CULTURAL RESOURCES

15Hd495

The site location maps are in Appendix B. The location of 15Hd495 is shown in Figure B-1. The location of the site on the 1919 Fort Knox Land Acquisition Map is shown in Figure B-2. The site plan is Figure B-3, and a soil profile from the cistern is depicted in Figure B-4.

Site 15Hd495 is a late nineteenth to mid twentieth century farmstead located on a knoll and southwest hill slope at an approximate elevation of 550 feet \pm 10 feet. Historically, the farmstead structure complex circled the north side of a large sinkhole. Drainage patterns have been extensively altered near the site due to the development of roads, a golf course, and housing areas, and the closest flowing water source is an intermittent tributary of Mill Creek located 560 m southwest of the site. The sinkhole probably held water and was used to water livestock. A cistern was located on the site, and supplied water to the house.

The 1919 Army land acquisition maps depict some properties, including this one, which adjoined the acquired properties. The maps indicate that there were seven standing structures on the farmstead at that time (Figure B-2), when it was owned by Charles Campbell. James Bennett owned the farm in the 1940's, when the Army acquired it, however, and it is not known how many buildings were present at the time of acquisition. During the current survey, evidence of only two buildings and a cistern were found (Figure B-3). A cistern (1.45 m in diameter) and the concrete foundations of a small building (2.9 m by 2 m) were present. The partial limestone cobble foundations of the house (approximately 7 m by 5 m) were present, but the cobbles had been displaced by bulldozing. Cultural materials and structural ruins were observed in a 20 m by 30 m area. Most of the artifacts date to the more recent Bennett occupation of the farmstead. The area west of the site had been heavily modified by bulldozing during the construction of the quonset hut, and it is not known if the site extended into this area prior to the bulldozing.

Several bulldozer piles, probably dating from the time of Army acquisition (ca. 1940) and/or creation of the adjoining golf course (ca. 1948), were present on the site, and the concrete foundations had been distorted through crushing by the bulldozer. A dump, located south of the farm road which passed through the site, had been bulldozed dur-

ing the creation of the alternate vehicle path used in the construction of the quonset hut. The bulldozing had scattered and crushed the materials from the dump. The cistern and building foundations had been filled in, probably at the time of Army acquisition, but the fill had partially settled. The Army frequently razed standing structures and filled in or dug out foundations to reduce the risk of accidents.

Site 15Hd495 is not eligible for the National Register. It has been disturbed by bulldozing on at least two occasions. A dump associated with the site was recently destroyed by bulldozing. The cistern and a small building foundation had been filled in since Army acquisition, and are unlikely to contain intact archaeological deposits. Evidence was found of only two of a minimum of seven buildings known to have existed in 1919, so only a portion of the historic farmstead translated into an archaeological site.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The Phase I archaeological investigation of the proposed pipeline and the adjacent area resulted in the recording of site 15Hd495. Site 15Hd495 is a late nineteenth to mid twentieth century farmstead. It is not eligible for the National Register due to previous disturbance. No additional archaeological work is recommended for 15Hd495. It is recommended, however, that additional fill be placed in the cistern and in the small building foundation to fill them to ground surface. The proximity of these partially filled features to the golf course and road constitute a safety hazard.

No cultural materials were found in or near the pipeline corridor. No cultural materials were found in the immediate vicinity of the quonset hut. Inspection of the area around the quonset hut indicated that this area had been previously borrowed to subsoil, probably during the construction of the golf course in the 1940's. The construction of the quonset hut is therefore unlikely to have affected any significant cultural resources. The bulldozing of the alternate vehicle path and the edge of the woods during the construction of the quonset hut did affect an unrecorded, unassessed cultural resource, which was recorded as 15Hd495 in the current survey. Although site 15Hd495 is not eligible for the National Register, its condition prior to the most recent bulldozing cannot be determined. Efforts were made after the survey to contact the golf course supervisor (Frank Mudd) to inform him of Section 106 compliance requirements, but he could not be reached. A copy of this report will be sent to Mr. Mudd, to hopefully prevent such events from occurring in the future, and to notify him of the safety hazard present in the form of the open features.

If archaeological materials are discovered during the construction activities, all activity in the vicinity of the finds must cease and the State Historic Preservation Officer (502-564-6661) and the DPW staff archaeologist (502-624-6581) should be contacted, so a representative of those agencies may evaluate the materials. Also, if human remains, regardless of age or cultural affiliation, are discovered, all activity in the vicinity of the remains must cease immediately, and the state medical examiner (502-564-4545) and the appropriate local law enforcement agency (Fort Knox Law Enforcement Command, 502-624-6852) must be contacted, as stipulated in KRS 72.020.

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 by Roy S. Dickens, Jr. Academic Press, New York.

APPENDIX A.
RESUMES OF KEY PERSONNEL

Pamela A. Schenian
Staff Archaeologist and Project Principal Investigator

Office Address: Directorate of Public Works
ATTN: ATZK-DPW (Schenian)
U.S. Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
Phone: (502) 624-6581

Date and Place of Birth: January 1, 1959; Waukesha, WI.

Present Position: J.M. Waller & Associates/Fort Knox Staff
Archaeologist and Cultural Resource Manager

Education:

A.B.D. in Anthropology, Northwestern University, 1984.
M.A. in Anthropology, Northwestern University, 1982.
A.B. in Anthropology, Bryn Mawr College, 1980.

Previous Employment:

Senior Staff Archeologist, Archeology Service Center,
Department of Sociology, Anthropology, and Social Work, Mur-
ray State University, Murray, KY, November 1991-June 1993;
Staff Archeologist, November 1983-November 1991.

Southern Illinois University, Carbondale, IL: Field
Technician, November-December 1985, September-October 1984.

Illinois State Museum Society, Springfield, IL: Field
Assistant II (Supervisor), summer 1983; Field Technician,
summer 1981.

Center for American Archeology, Kampsville, IL: Field
Technician, summer 1982.

Department of Anthropology, Northwestern University,
Evanston, IL: Teaching Assistant, 1981-82 academic year.

Great Lakes Archeological Research Center, Milwaukee,
WI: Field Technician, summer 1979.

Field Research Experience:

Prehistoric and historic archaeological projects in the
states of Illinois, Indiana, Kentucky, New Jersey, South
Dakota, Tennessee, and Wisconsin, 1979-present.

Professional Publications, Reports, Papers and Manuscripts:
87 CRM contract reports on projects in Indiana, Kentucky,
and Tennessee.

1 Homicide site excavation contract report prepared in lieu
of court testimony in Illinois.

7 Papers presented at professional conferences.

5 Publications, 1 in press.

Doctoral candidacy qualifying paper: "A Theory of Individ-
ual Style Variation for Archeological Studies".

Manuscript submitted in partial fulfillment of the M.A.

requirements: "Models of Environmental-Cultural Relation-
ships: Testing with Archeological Evidence".

Stephen T. Mocas
Assistant Staff Archaeologist

Office Address: Directorate of Public Works
ATTN: ATZK-DPW (Mocas)
U.S. Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
Phone: (502) 624-6581

Present Position: University of Louisville Program of
Archaeology/Fort Knox Assistant Staff Archaeologist

Education:

Completed one year of doctoral program, Southern Illinois University, Carbondale, Illinois, 1972.

B.A. in Anthropology, University of Louisville, 1971.

Previous Employment:

Indiana University, Bloomington, Indiana: Staff Archaeologist, September 1991-November 1993.

Murray State University, Murray Kentucky: Staff Archaeologist, November 1991-November 1993.

Jefferson Community College, Louisville, Kentucky.
Anthropology Instructor, August 1981-December 1982.

Louisville School of Art, Louisville, Kentucky: Anthropology Instructor, January-May 1976.

University of Louisville Archaeological Survey, Louisville, Kentucky. Project Director, Field Supervisor, or Research Assistant on various projects, July 1969-January 1977.

State University of New York of Buffalo, Buffalo, New York. Senior Field Worker, June-August 1970.

Field Research Experience:

Field experience, Phase I-III, prehistoric and historic archaeological projects in the states of Illinois, Indiana, Kentucky, New York, and Tennessee, 1969-present.

Research Grants:

Six grants for fieldwork and research.

Professional Publications, Reports, Papers and Manuscripts:

3 non-contract site reports on projects
19 CRM contract reports on projects
5 Chapters in additional site reports.
4 Publications, 1 in press.

APPENDIX B.

LOCATION OF 15Hd495 AND SITE PLAN